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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/091,658

03/04/2002

Juan-Antonio Sanchez-Herrero

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7238

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ERICSSON INC.
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EXAMINER

NGUYEN, THANH T

ART UNIT

PAPER NUMBER

2144

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/091,658

Applicant(s)

SANCHEZ-HERRERO ET AL.

Examiner

Tammy T. Nguyen

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 17-33 and 35-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 17-33 and 35-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



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Detailed Office Action

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 30, 2007 has been entered.
2. Claims 1-37 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-10, 14-22, 25-31, 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al., (hereinafter Chang) U.S. Patent No. 6,681,114 in view of Philyaw., (hereinafter Philyaw) U.S. Patent 6,835,799.

5. As to claim 1, Chang discloses the invention substantially as claimed, Change teaches including in a network resolution domain having a plurality of users identifiers on a per subscriber basis for identifying a user under different service environments, a User Distribution Server (UDS) disposed to determine from a plurality of network servers the specific network server in charge of said user under a particular service environment, said UDS comprising: a secondary database having a user identifier (fig.3, profile database 107); a mechanism for transferring user identifiers and said selected service data to said secondary database from primary databases associated with respective network servers (fig.3, profile proxy server 108); a querying mechanism for receiving a service request from a Service Requester Node (fig.3, 112)(fig.3, message server 106); and a response mechanism for sending a server identifier of said specific network server to the Service Requester, wherein the server identifier is usable by said Service Requester Node (Fig.3, 112) to determine said specific network server (Fig.3, SGSN 152). However, Chang does not explicitly teach having storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis.
6. In the same field of endeavor, Philyaw discloses (e.g., method and apparatus for tracking... a global network). Philyaw discloses having storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis [see Philyaw col.26, lines 1-29 and col.28, lines 1-20](the software hosted on the PC may also track the user activities

and interests as the user visits various web sites disposed on the response to certain aspects of the user profile obtained from the CRS database).

7. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Phiyaw's teachings of a method and apparatus for tracking user profile and habits on a global network with the teachings of Chang to have storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis because it would have provided specific functions that increasing number of companies connecting to perform on-line E-commerce necessitates a large database [see Phiyaw col.3, lines 10-13].
8. As to claim 2, Chang teaches the invention as claimed, wherein: said response mechanism transmits an answer comprising, selectively, the specific network server in charge of said user under a particular service environment; a list of possible servers if a redundant configuration exists; and a new user identifier with an indication that another query on said new identifier necessary (see col.6, lines 1-32).
9. As to claim 3, Chang teaches the invention as claimed, wherein said UDS is adapted as a first UDS and said network includes a second UDS, and wherein: said transfer, querying and response mechanism are respectively disposed to transmit data between first UDS and second UDS (see col.8, lines 25-34).
10. As to claim 4, Chang teaches the invention as claimed, wherein: said transferring mechanism comprises operating means for recovering user identifiers and necessary

service data from specific network servers acting as primary databases (Fig.3, profile proxy server 108).

11. As to claim 5, Chang teaches the invention as claimed, wherein: the operating means includes means for informing said UDS about needs for updating user identifiers and/or necessary service data at indication from primary databases or another UDS (fig.3).
12. As to claim 6, Chang teaches the invention as claimed, wherein: the operating means includes means for said UDS registering into and withdrawing from all network servers intended for acting as primary databases (fig.3, profile proxy server 108).
13. As to claim 7, Chang teaches the invention as claimed, wherein: the operating means includes means for indicating recovery preferences for recovering user identifiers and/or necessary service data for all served users, for a specific set of users, or only for a particular user (fig.3, 112).
14. As to claim 8, Chang teaches the invention as claimed, wherein: the operating means further includes means for recovering user identifiers and necessary service data selectively, for at least one set of: (a) identifiers of a specific type amongst a plurality of valid identifier types; (b) identifiers used in specific domains; and (c) identifiers belonging to specific identification spaces in a domain. (see col.6, lines 33-65).
15. As to claim 9, Chang teaches the invention as claimed, wherein data sensitive to temporary validity per specific network service include a "Time To Live" (TTL) parameter intended for determining the needs for data recovery from primary databases (see col.1, line 62 to col.2, line 5).

16. As to claim 10, Chang teaches the invention as claimed, further comprising: at least one protocol handler module and, in the event said UDS comprises more than one protocol handler module, a protocol discriminator module, each protocol handler module being in charge of a particular telecommunications protocol (fig.3, IP network 120).
17. As to claim 12, Chang teaches the invention as claimed, comprising: at least one "Diameter" related protocol handler module (fig.3, IP Network).
18. As to claim 14, Chang teaches the invention as claimed, comprising: at least one "Radius" related protocol handler module (fig.3).
19. As to claim 15, Chang teaches the invention as claimed, further comprising protocol and processing means for responding to the service request using an external database not intended for acting as primary database or as another UDS (see fig.3).
20. As to claim 16, Chang teaches the invention as claimed, wherein said external database is a number portability database (see col.4, lines 1-15).
21. As to claim 17, Chang teaches the invention as claimed, including a telecommunications system comprising: at least one subscriber having a identifying said subscriber under different service environments (Fig.3, 112); a plurality of servers (Fig.2 server 106a, 106b, ...106d); and a User Distribution Server (UDS) for determining a specific network server in charge of said user under a particular service environment, wherein said UDS comprises: a secondary database (fig.3, profile database 107); a mechanism for transferring user identifiers and said selected service data to said secondary database from selected servers acting as primary databases

(fig.3, profile proxy server 108); a querying mechanism for receiving a service request from a Service Requester Node (fig.3, 112)(fig.3, message server 106); and a response mechanism for sending a server identifier of said specific network server to the Service Requester Node in response to said service request (Fig.3, SGSN 152).

However, Chang does not explicitly teach having storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis.

22. In the same field of endeavor, Philyaw discloses (e.g., method and apparatus for tracking... a global network). Philyaw discloses having storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis [see col.26, lines 1-29 and col.28, lines 1-20](the software hosted on the PC may also track the user activities and interests as the user visits various web sites disposed on the response to certain aspects of the user profile obtained from the CRS database).
23. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Philyaw's teachings of a method and apparatus for tracking user profile and habits on a global network with the teachings of Chang to have storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis because it would have provided specific functions that increasing number of companies connecting to perform on-line E-commerce necessitates a large database [see Philyaw col.3, lines 10-13].

24. As to claim 18, Chang teaches the invention as claimed, wherein: relevant user identifiers in at least one of a plurality of primary databases may be submitted for updating to one specific UDS, to a group of UDS, or to all UDS known at said at least one of a plurality of primary database, selectively (Fig.3, profile proxy server 108, profile database 107).
25. As to claim 19, Chang teaches the invention as claimed, wherein: at least one of the plurality of primary databases is arranged for receiving UDS recovery preferences from one specific UDS, from a group of UDS, or from all UDS known at said at least one primary database, selectively, and for updating each UDS accordingly with each of the recovery preferences (fig.3).
26. As to claim 20, Chang teaches the invention as claimed, wherein: the UDS acts as a Subscription Locator Function (SLF) (see col.7, lines 55-61).
27. As to claim 22, Chang teaches the invention as claimed, wherein: at least one of the plurality of specific servers acting as primary databases is a Presence Server (Fig.3, profile proxy server).
28. As to claim 25, Chang teaches the invention as claimed, wherein: at least one of the plurality of Service Requester Nodes is a Mobile Switching Center (MSC) (see col.7, lin55 to col.8, line 10).
29. As to claim 26, Chang teaches the invention as claimed, wherein: at least one of the plurality of Service Requester Nodes is a Signaling Gateway (fig.3, 112).
30. As to claim 27, Chang teaches the invention as claimed, wherein: at least one of the plurality of Service Requester Nodes is a GPRS Supporting Node (fig.3, 112).

31. As to claim 28, Chang teaches the invention as claimed, wherein: at least one of the plurality of Service Requester Nodes is an Application Server (AS) intended for multimedia related use (see col.9, lines 15-60).
32. As to claim 29, Chang teaches the invention as claimed, wherein: at least one of the plurality of Service Requester Nodes is an Open Service Architecture Service Capability Server (see fig.2, servers).
33. As to claim 30, Chang teaches the invention as claimed, wherein: at least one of the plurality of Service Requester Nodes is a Multimedia Messaging Server (fig.3, message server 106).
34. As to claim 31, Chang teaches the invention as claimed, wherein: at least one of the plurality of Service Requester Nodes is a CAMEL Gateway Server (Fig.3, gateway 111).
35. As to claim 34, Chang teaches the invention as claimed, wherein: at least one of the plurality of external databases used for resolution is a number portability database (fig.3).
36. As to claim 35, Chang teaches the invention as claimed, including in a network resolution domain having a per subscriber basis for identifying a user under different service environments, and wherein a User Distribution Server (UDS) is disposed to determine from a plurality of network servers the specific network server in charge of said user under a particular service environment, a method for operating the UDS comprising the steps of: establishing a secondary database in said UDS for storing user identifiers (fig.3, profile database 107); transferring user identifiers and said

selected service data to said secondary database from primary databases associated with respective network servers (fig.3, profile proxy server 108); receiving a service request from a Service Requester Node (fig.3, 112)(fig.3, message server 106); and sending a server identifier of said specific network server from said UDS to said Service Requester Node (Fig.3, 112) in response to said request, said server identifier usable by said Service Requester Node to determine and specific network server (Fig.3, SGSN 152). However, Chang does not explicitly teach having storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis.

37. In the same field of endeavor, Philyaw discloses (e.g., method and apparatus for tracking... a global network). Philyaw discloses having storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis [see col.26, lines 1-29 and col.28, lines 1-20](the software hosted on the PC may also track the user activities and interests as the user visits various web sites disposed on the response to certain aspects of the user profile obtained from the CRS database).
38. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Phiyaw's teachings of a method and apparatus for tracking user profile and habits on a global network with the teachings of Chang to have storage for plurality of user identifiers for identifying the user different service environments, and selected service data per specific network server and per user basis because it would have provided specific functions that

increasing number of companies connecting to perform on-line E-commerce necessitates a large database [see Philyaw col.3, lines 10-13].

39. As to claim 36, Chang teaches the invention as claimed, wherein: said transmitted answer comprises, selectively, the specific network server in charge of said user under a particular service environment; a list of possible servers if a redundant configuration exists; and a new user identifier with an indication that another query on said new identifier is necessary (see col.6, lines 1-32).
40. As to claim 37, Chang teaches the invention as claimed, wherein said UDS comprises a first UDS and said network includes a second UDS, and wherein: said transfer, receiving and answer transmitting steps, respectively include data transmission between said first UDS and said second UDS (see col.8, lines 25-34).
41. Claims 11, 13, 21, 23, 24, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al., (hereinafter Chang) U.S. Patent No. 6,681,114 and Philyaw., (hereinafter Philyaw) U.S. Patent 6,835,709 in view of Richard Paul Ejzak., (hereinafter Ejzak) U.S. Patent No. 6,871,070.
42. As to claims 11 and 32, Chang, and Philyaw do not explicitly teach domain name server (DNS). However, Ejzak teaches Domain Name Server (see col.8, lines 58-67). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have a Domain Name Server because it would have provided specific functions that can Translating the name into the IP address.

43. As to claims 13, and 33, Chang and Philyaw do not explicitly teach "Light-Weight Directory Access Protocol (LDAP)". However, Ejzak teaches Light-Weight Directory Access Protocol (LDAP)(see col.6, lines 56-67). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have Light-Weight Directory Access Protocol because it would have provided specific functions that can make it possible for almost any application running on virtually any computer platform to obtain directory information, such as email addresses and public keys.
44. As to claim 21, Chang, and Philyaw do not explicitly teach a Home Subscription Server (HSS). However, Ejzak teaches Home Subscription Server (HSS) (see col.4, lines 13-21, and col.6, lines 26-31). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have Home Subscription Server (HSS) because it would have provided specific functions can be used to provide high-speed connectivity between LANs, such as token ring and Ethernet.
45. As to claim 23, Chang, and Philyaw do not explicitly teach Interrogating Call Status Control Function (I-CSCF). However, Ejzak teaches Interrogating Call Status Control Function (see col.7, lines 50-67, and col.10, lines 16-38). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have Interrogating Call Status Control Function (I-CSCF) because it would have provided

specific functions to be furnished with the actual name or address of the HSS holding the data for the particular subscriber.

46. As to claim 24, Chang, and Phiyaw do not explicitly teach a Serving Call Status Control Function (S-CSCF). However, Ejzak teaches a Serving Call Status Control Function (S-CSCF) (see col.14, lines 11-42). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Ejzak into the computer system of Chang to have a Serving Call Status Control Function (S-CSCF because it would have provided specific functions to be furnished with the actual name or address of the HSS holding the data for the particular subscriber.

Conclusion

47. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ***William Vaughn*** can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the

Art Unit: 2144

Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

W

April 14, 2007

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